

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FR2004/002147A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01D21/00 B01D21/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B01D C02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 348 156 A (SEE EPURATION ENTREPRISES SA) 10 November 1977 (1977-11-10) page 1, line 28 - line 38; claims 1-4; figures	1-10
X	EP 0 423 964 A (INFILCO DEGREMONT LTD) 24 April 1991 (1991-04-24) column 7, line 26 - line 43; claims 1-4; figures 1,5-7	1-23
X	US 3 399 135 A (RICE ARCHIE H ET AL) 27 August 1968 (1968-08-27) column 4, line 55 - column 5, line 15; figure 6	1
X	US 6 171 483 B1 (EDEN ROBERT DAVID ET AL) 9 January 2001 (2001-01-09) column 3, line 44 - line 55; figure 2	1
	----- -/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

9 December 2004

Date of mailing of the international search report

16/12/2004

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Fourgeaud, D

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR2004/002147

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 736 037 A (MEURER CHARLES LONNIE) 7 April 1998 (1998-04-07) claims; figures 1A,2A-2C -----	1-23
A	US 4 933 524 A (MEURER CHARLES L) 12 June 1990 (1990-06-12) claims 30-34,44; figures 2,38 -----	1-23

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR2004/002147

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2348156	A	10-11-1977	BE 840717 A1 FR 2348156 A1 OA 5329 A	02-08-1976 10-11-1977 28-02-1981
EP 0423964	A	24-04-1991	CA 1315703 C EP 0423964 A1 ES 2043291 T3 US 5089136 A	06-04-1993 24-04-1991 16-12-1993 18-02-1992
US 3399135	A	27-08-1968	BE 717800 A DE 1784190 A1 ES 355051 A1 FR 1578228 A JP 51031454 B NO 123697 B SE 359450 B	16-12-1968 19-08-1971 16-11-1969 14-08-1969 07-09-1976 27-12-1971 03-09-1973
US 6171483	B1	09-01-2001	AU 731484 B2 AU 1931997 A BR 9707537 A WO 9730268 A1 GB 2328462 A ,B NO 983715 A	29-03-2001 02-09-1997 04-01-2000 21-08-1997 24-02-1999 13-10-1998
US 5736037	A	07-04-1998	NONE	
US 4933524	A	12-06-1990	US 4865753 A AT 106263 T CA 1324768 C DE 68915752 D1 DE 68915752 T2 EP 0403590 A1 WO 8912492 A1 US 5116443 A	12-09-1989 15-06-1994 30-11-1993 07-07-1994 19-01-1995 27-12-1990 28-12-1989 26-05-1992